

## Series 1000 M12 - Size 1, 2 and 3

The ISO 5599/1 Solenoid valves Series 1000 M12 are available in three sizes with flow rates from 900 NI/min for size 1 up to the 3600 NI/min for size 3.

The standard features of the ISO valves are still included, however, they are now combined with a M12 electrical connector located in the middle of the valve to manage the electrical signals.

Versions are available to suit valves with both single and double 24VDC solenoids complete with IP65 protection.

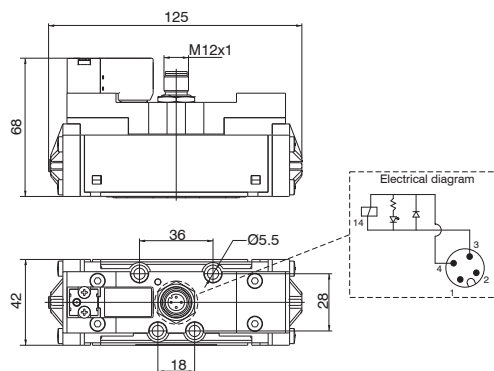
All version are supplied with LED indicators

“Shifting time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001”

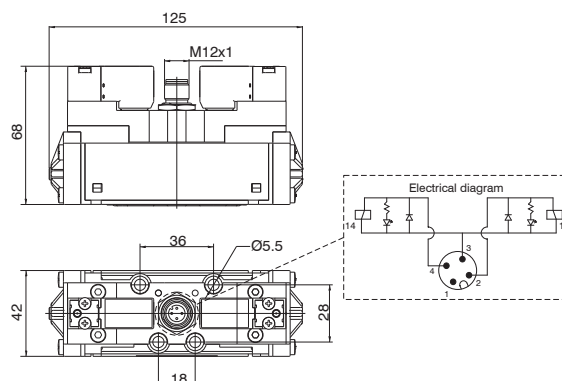
### Electrical characteristics

Electrical connector M12x1  
Protection degree IP65  
Input voltage 24VDC  
Nominal power 2,3W  
LED identification

### Monostable version



### Bistable version

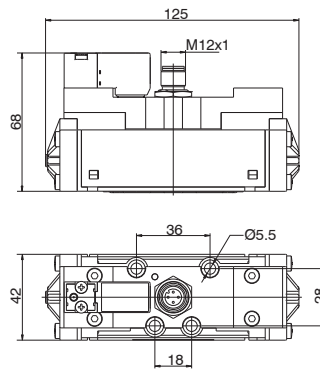


**Solenoid-Spring**

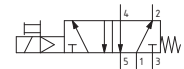
Coding: 1111.52.3.9.Ⓡ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	2,5
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (NI/min)	900
Response time according to ISO 12238, activation time (ms)	16
Response time according to ISO 12238, deactivation time (ms)	122

Ⓡ	VOLTAGE
	12P = 24VDC



Weight 350 g

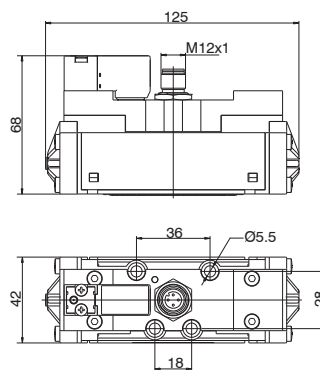


**Solenoid-Differential**

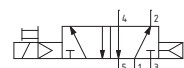
Coding: 1111.52.3.6.Ⓡ

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	2
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (NI/min)	900
Response time according to ISO 12238, activation time (ms)	32
Response time according to ISO 12238, deactivation time (ms)	51

Ⓡ	VOLTAGE
	12P = 24VDC



Weight 356 g

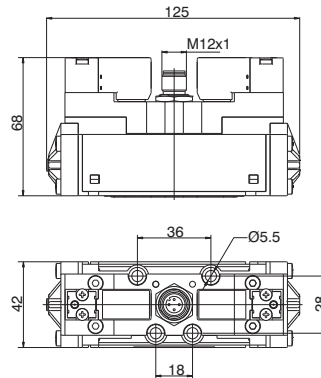


**Solenoid-Solenoid 5/2**

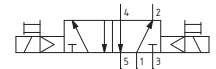
Coding: 1111.52.3.5. **①**

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	1.5
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	900
Response time according to ISO 12238, activation time (ms)	13
Response time according to ISO 12238, deactivation time (ms)	14

<b>①</b> VOLTAGE
12P = 24VDC



Weight 390 g

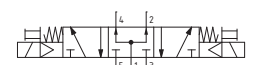
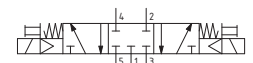
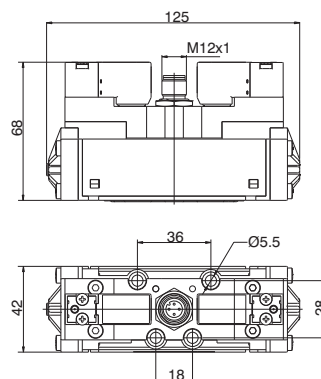


**Solenoid-Solenoid 5/3**

Coding: 1111.53. **②**.3.5. **①**

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	3
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	900
Response time according to ISO 12238, activation time (ms)	18 (Closed centres) 18 (Open centres) 19 (Pressured centres)
Response time according to ISO 12238, deactivation time (ms)	19 (Closed centres) 20 (Open centres) 18 (Pressured centres)

FUNCTION
<b>②</b> 31 = Closed centres
32 = Open centres
33 = Pressured centres
VOLTAGE
12P = 24VDC



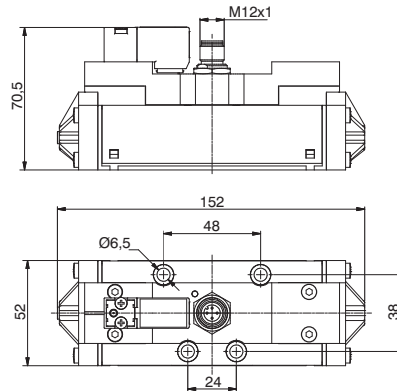
Weight 392 g

**Solenoid-Spring**

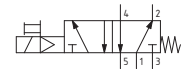
Coding: 1112.52.3.9.①

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	2,5
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1600
Response time according to ISO 12238, activation time (ms)	24
Response time according to ISO 12238, deactivation time (ms)	124

①	VOLTAGE
	12P = 24VDC



Weight 510 g

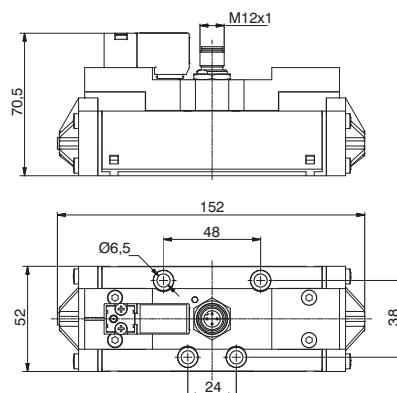


**Solenoid-Differential**

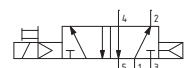
Coding: 1112.52.3.6.①

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	2
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1600
Response time according to ISO 12238, activation time (ms)	37
Response time according to ISO 12238, deactivation time (ms)	90

①	VOLTAGE
	12P = 24VDC



Weight 515 g

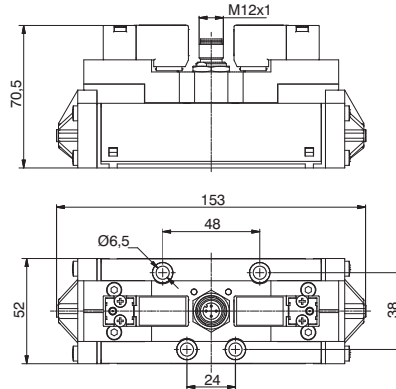


**Solenoid-Solenoid 5/2**

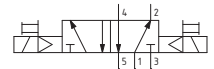
Coding: 1112.52.3.5.①

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	1.5
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (NI/min)	1600
Response time according to ISO 12238, activation time (ms)	17
Response time according to ISO 12238, deactivation time (ms)	20

①	VOLTAGE 12P = 24VDC
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Weight 550 g

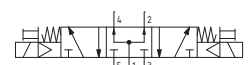
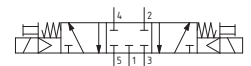
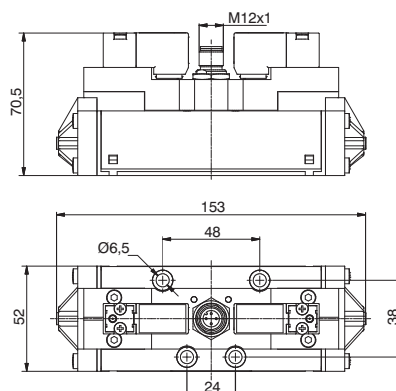


**Solenoid-Solenoid 5/3**

Coding: 1112.53.②.3.5.①

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	3
Temperature °C	-5 ... +50
Flow rate at 6 bar with Δp=1 (NI/min)	1600
Response time according to ISO 12238, activation time (ms)	18 (Closed centres) 18 (Open centres) 20 (Pressured centres)
Response time according to ISO 12238, deactivation time (ms)	112 (Closed centres) 106 (Open centres) 118 (Pressured centres)

FUNCTION	
②	31 = Closed centres 32 = Open centres 33 = Pressured centres
①	VOLTAGE 12P = 24VDC



Weight 560 g

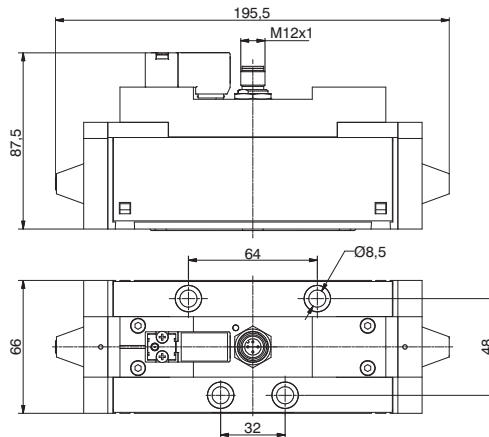
**Solenoid-Spring**

Coding: 1113.52.3.9.①

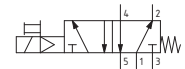
**Operational characteristics**

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	2,5
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	3600
Response time according to ISO 12238, activation time (ms)	46
Response time according to ISO 12238, deactivation time (ms)	254

①	VOLTAGE
	12P = 24VDC



Weight 1360 g



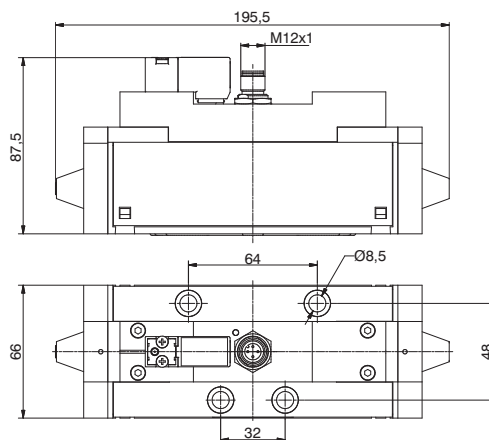
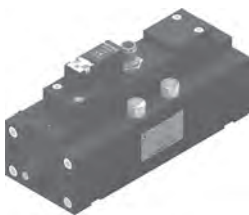
**Solenoid-Differential**

Coding: 1113.52.3.6.①

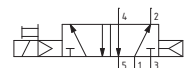
**Operational characteristics**

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	2
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	3600
Response time according to ISO 12238, activation time (ms)	78
Response time according to ISO 12238, deactivation time (ms)	180

①	VOLTAGE
	12P = 24VDC



Weight 1360 g



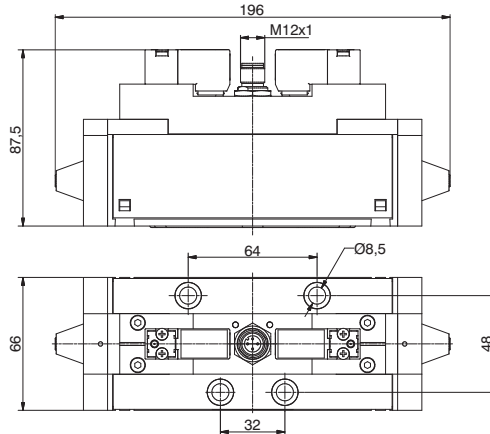
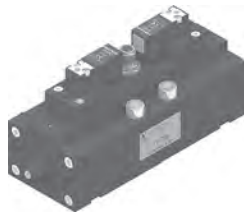
1 AIR DISTRIBUTION

**Solenoid-Solenoid 5/2**

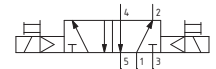
Coding: 1113.52.3.5.①

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	1.5
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	3600
Response time according to ISO 12238, activation time (ms)	32
Response time according to ISO 12238, deactivation time (ms)	37

①	VOLTAGE
	12P = 24VDC



Weight 1370 g

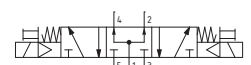
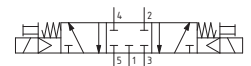
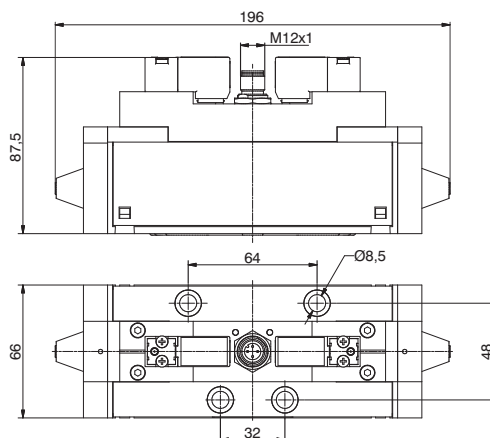
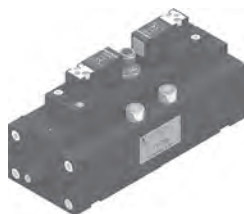


**Solenoid-Solenoid 5/3**

Coding: 1113.53.②.3.5.①

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max. working pressure (bar)	10
Minimum pilot pressure (bar)	3
Temperature °C	-5 ... +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	3600
Response time according to ISO 12238, activation time (ms)	30 (Closed centres) 30 (Open centres) 32 (Pressured centres)
Response time according to ISO 12238, deactivation time (ms)	305 (Closed centres) 230 (Open centres) 270 (Pressured centres)

	FUNCTION
②	31 = Closed centres
	32 = Open centres
	33 = Pressured centres
①	VOLTAGE
	12P = 24VDC



Weight 1380 g